



Buzzwords ...



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..... the newsletter for National Beekeepers' Association members

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FROM THE PRESIDENT

You will now all have received a copy of the associate Minister's letter to executive denying our request for continued funding of the honey bee endemic disease control programme. We included the letter in full as an insert to last month's *Buzzwords*. I believed it was important that all members saw that letter and so I took the decision to hold back publication of *Buzzwords* until the letter was finally received by the NBA head office.

Your national executive met on September 10-11 to discuss the issue and decide how best to proceed. I must tell you that your executive was divided on its feelings towards "user pays" and the endemic disease control programme. Those in the north, involved in kiwifruit pollination to the main, believed we had to at least maintain the 10% inspection programme which was

the status quo up until this year. They regard the money spent on such a programme by beekeepers as an insurance policy and believe we are sitting on a powder keg as far as disease is concerned.

Those in the deep south, having experienced two bad seasons and poor prospects price-wise for their honey, believe they do not have the money to pay for any extra expenses. They also see it as unfair that there is only one AAO serving the whole of the South Island. In other words, they can't see any future in paying an extra amount on the levy. They are concerned that if our AAO's are transferred into other areas of agricultural servicing, their training will be lost to the industry and the prospect of getting them back at a later date will be very unlikely.

Murray Reid, MAF's National Manager for Apiculture, advised the executive that it would not be practical to apply MAF's

option B (10% of apiaries divided between MAF inspections and diseaseathons) in this current year. He said that option C (branch diseaseathons) could be delivered this year, but would result in some loss of services. He felt the one year gap until we could implement option B would not inflict permanent damage on the Ministry's ability to provide such a service at a later date, provided a contract for that service was signed early next year. Beekeepers should note, however, that any loss of staff would not be replaced.

It has been necessary to approach the Minister of Agriculture to increase the hive levy by 9 cents to fund the endemic bee disease programme, and a further 6 cents to cover a shortfall in NBA administrative expenses. This will increase the hive levy for the coming year to 70 cents per hive. I believe a commodity levy as originally envisioned is still worth pursuing.

Dudley Ward, NBA President

LEARNING NEW THINGS ABOUT FOULBROOD

Dr. Mark Goodwin and his team at Ruakura are carrying out a three year investigation on the incidence and nature of American foulbrood disease. AFB is something most beekeepers think they know a lot about, but Mark's work is revealing new insights as well as challenging a number of our long-held assumptions about the disease.

Mark points out that while the reported incidence of AFB in New Zealand is low by world standards, at 1.2% of managed colonies and 7% of apiaries, these figures have increased over the last 40 years, with the sharpest increase being experienced in the last 5 years. Direct losses from reported cases of American foulbrood were \$575,000 in 1989-90, while the labour involved in inspecting colonies for disease control was estimated to cost the industry another \$1.25 - \$2 million per year.

That's for the disease we know about. What's worrying is that Mark has found that inapparent infections exist in a number of colonies which show no "visual" signs of the disease. Last year adult bee samples were taken from 353 hives in New Zealand's main cities and towns. Each hive received a full brood check from experienced inspectors. The results showed that over 11% of the samples tested positive for *Bacillus larvae* spores. This is despite the fact that the inspectors found only one quarter of those hives had visual signs of infection. Mark believes that if this ratio

is at all representative of the rest of New Zealand then the incidence of AFB may be 4 times higher than the official figures indicate (i.e. 4.8% instead of 1.2%). Interestingly, the Tauranga apiary district was highly under-represented in these figures (76% less inapparent infections), even though the district had a reported disease level above the national average.

Mark has suggested two explanations for this high level of inapparent infections. It is quite possible that the larger number of colonies exhibiting inapparent infections is typical *Bacillus larvae* behaviour. If that is the case, a certain proportion of the colonies with inapparent infections may develop visual symptoms and add to the AFB statistics for the following year. The remainder of colonies, he suggests, could quite likely rid themselves of the disease completely.

The second and more disturbing possibility is that the high level of inapparent infections is a reflection of the increasing incidence of recorded AFB infections being experienced currently. In that case it would be likely that most of the inapparent infections would turn into apparent infections over the next few years. The inapparent infections therefore giving us a preview of the level of AFB we will experience in a few years' time.

Mark is also conducting a study to determine the speed of development of low level AFB infections. Test colonies were chosen with less than 10 larvae exhibiting visual symptoms. These colonies were then inspected at fortnightly intervals for visual symptoms and the number of larvae showing symptoms was recorded.

Mark has found a large variation between these colonies in the speed of development of the disease. Infections can subsist at low levels for considerable lengths of time. Adult bee tests on 2 of the colonies indicated that even though the hives had been infected for at least 212 days, after that time they failed to exhibit any visual symptoms or test positive for spores on adults for a further 160 days. Some colonies give the appearance of having eliminated the infections, at least temporarily.

However, once the disease starts to develop the number of infected cells can increase exponentially. The rapid development of the disease in some of the other test colonies suggests that there is a large possibility that a very light infection (no visual symptoms or just one or two diseased larvae) could easily be overlooked and turn into a very bad infection. This would be a major risk to neighbouring colonies by the next time the hive was checked.

While we're on the subject of what we know (and thought we knew) about foulbrood, Mark Goodwin reports that he is having trouble with his study of spore levels in feral hives because no one out there is sending him any bees. We published Mark's request for samples in the May issue of *Buzzwords*, but so far he has only received one reply! Mark needs several hundred samples, not one or two, if this study is to have any meaning, so come on everybody, help him out. Mark suggests a good way to collect the sample is to put a

plastic bag over the entrance of the hive, wait until 30-40 bees are captured, and then tie off the bag. Mail to:

Dr. Mark Goodwin
Apicultural Research Unit, MAFtech
Ruakura Agricultural Research Centre
Private Bag, HAMILTON

Include your name, phone number, and location of hive (property owner and road).



Mark has also produced some results which seriously challenge the assumption that drift is a major source of American foulbrood spread, at least from colonies with low levels of AFB. He placed pairs of colonies facing the same direction so close together that their sides touched. In each pair one hive was clean while the other was infected with AFB. As you can imagine, the drift between colonies was quite marked, with 5.7% of bees drifting to the other hive in two days. But despite this drift, the colonies stayed together for a total of 1124 days (3.07 years!) without any of the control colonies developing AFB infections. Mark believes this work suggests that bees drifting from colonies with low level infections of AFB (less than 50 cells) are not a major risk in the spread of AFB between colonies.

Ruakura Apicultural Research And Advisory Unit Annual Report 1990-91

HEARD AT CONFERENCE (III)

"If you are arguing points of order, where are your priorities for the industry?"

"The thing that you're asking for is not what you're asking for."

"Beekeepers owe apologies to no one because of the service they provide this nation."

"They've already passed a law about that. It's called Murphy's Law."

RESEARCH FUNDING DATA BASE

The Apicultural Research Advisory Committee, a subcommittee of the NBA, has put together a research funding computer database. The information, compiled by Dr. Mark Goodwin, includes all known sources of research funding, both public and private, which may be of use to apiculture. The information is cross-referenced to aid in matching funding requirements to research topics.

To make use of this database write to the Apicultural Research Advisory Committee, National Beekeepers Association, PO Box 4048, WELLINGTON

NBA Executive

BRANCH NOTES

The Canterbury branch has set a monthly meeting schedule. Meetings will take place on the first Thursday of every month at the Cashmere Club, Christchurch, beginning at 7 pm. Their next meeting is October 3.

A further reminder that the Southern North Island branch will be holding its Spring Field Day at Rob and Beth Johnson's property, Whelans Rd., Levin, on Saturday, October 12, beginning at 10 am.

The Auckland branch will be having a pot luck dinner on Thursday, October 17, at Ian and Joy Brownings's, Great South Road, Bombay, (right next to St. Stephens School), beginning at 6:30 pm. Members are requested to bring their own food, drink, and utensils. According to the branch

secretary, the dinner should be "a great opportunity to mix, natter, and relax before pollination".

The Hawkes Bay branch will hold its next meeting on Tuesday, October 8, at the Polytech, beginning at 7:30 pm. Topic for discussion will be harvesting and marketing alternative hive products. Ron Morrison, the branch secretary, also advises that invitations have been sent out to a variety of businesses inviting participation in next year's annual conference. If your group or business has been overlooked, there are still opportunities for advertising, sponsorship, trade displays, or sales stalls. All you need to do is contact Ron - phone (06) 844 9493.

DRIVING LAWS

Federated Farmers is announcing success in its campaign to get the Ministry of Transport to revise the driving hours regime. The aim of the campaign is to make the regulations more workable, particularly where they affect farmers (and presumably beekeepers). Changes to the regime are likely to be included in transport law reform legislation due before Parliament in December.

Straight Furrow, August 1991

AFRICANISED BEES ON THE MOVE

This was to be the year when the front of Africanised bee migration finally arrived in the United States, and the USDA has mounted an intensive swarm trapping programme along the Texas-Mexico border to detect the bees' arrival. Reuters News Service reports that as of the beginning of August 1991, 103 Africanised swarms have been captured, although scientists believe the main body of bees is still about 125 km south of the Rio Grande. And as you would expect, the trapping programme certainly isn't 100% efficient. It is thought that a further 200 Africanised swarms may have eluded the traps and settled beyond the trap line in south Texas.

Typically, the Americans are throwing a lot of money at the problem. The June *USDA Extension Service Update* lists 30 Africanised bee research projects which are currently under way in the U.S. The difficulty seems to be one of lack of coordination on the regulatory and quarantine level, especially between the states and the federal government.

WIN SOME, LOSE SOME

When it comes to introducing biological control agents which adversely affect the beekeeping industry, it isn't often that we can report good news. But in the case of *Chilocorus kuwanae*, an exotic ladybird which was supposed to help control scale insects on kiwifruit, it looks like the powers-that-be finally listened. Your executive was one of the interested parties that filed a submission suggesting that the ladybird might also dine out on other scale insects, including the one that produces honeydew on Mountain Beech. The Chief Veterinary Officer considered these submissions, as well as a re-submission from DSIR, and has decided to prohibit the ladybird's release from quarantine.

Sentinel, August 1991



Applications for funding close on 15 August and 15 February. Forms available from the NBA, PO Box 4048, Wellington.

GATTcha!

The Uruguay Round and the GATT meetings have featured often in the press during the past 12 months. Some idea of what New Zealand is up against in the battle to defeat agricultural protectionism can be seen in figures from an OECD report showing that in the 1990 year. Various governments of rich countries around the world subsidised their farmers (via direct payments, price supports and cheap loans) to the tune of \$176 billion! This total, known as the Producer Subsidy Equivalent (PSE), was 17% higher than in 1989.

Although the European Community's PSE was by far the highest in dollar terms, as a proportion of its production it was a "mere" 48%, whereas Japan's figure was a staggering 68%. The net PSE figures (expressed as a percentage of total production value) for some major agricultural producers in 1990 are:

Japan	68%
EC	48%
Canada	41%
United States	30%
Australia	11%
New Zealand	5%

OECD Report, June 1991

PEN FRIENDS WANTED

Several beekeepers in Western Highlands Province are looking for beekeeper pen friends. Airborne Honey, Ltd., LEESTON, has passed on the following names which they received in a letter from PNG. The beekeepers are: John Boiwak, Matthew Give, Joseph Koima, Ola Morido, and John Dekene.

They can be reached by writing to PO Box 262, Mt. Hagen, Western Highland Province, PAPUA NEW GUINEA. Why not drop them a line and find out first hand what it's like keeping bees in a country which will soon have to come to terms with external mites.

POLLINATION COSTS

The next time your local kiwifruit grower complains about the high cost of pollination hives, hit him with this-- pollination costs for almonds in California are equal to 4.2% of gross sales of that crop, while the figure for New Zealand kiwifruit is actually less. Over the past three years, pollination fees for kiwifruit were only about 3.4% of gross sales.

Not only is almond pollination more expensive, it is also a much bigger business. Almond growers in California annually rent 650,000 hives for pollination purposes. That figure is more than twice the number of hives kept in all of New Zealand and represents a full 20% of the commercially operated hives in the U.S.

New Zealand Kiwifruit, September 1991

REFLECTIONS UPON KICKING OFF THE FIRST HIVE LID IN SPRING

Hail sky bright blue, no sign of rain!
Just wait till the willows flower again.
Dreaming of flows that never stop
So I forget that last year's crop.
When levering out stuck frames I hope
Grubs will not be brown and rope.
Lots of brood and not much feed,
We cater for their every need
With overdraft or hard earned loot.
Don't spill the syrup down your boot.
To orchards then, with straps of iron
And carbaryl and gusathion.
Ere summer comes we shift them back
On rainy nights with aching back.
Dull November starves some bees,
While others hang about in trees.
But later on, no time to play,
We'll gather honey while we may.
Those rotten lugs, I curse them so
When heavy frames fall on my toe.
Tons of drums, but all's not well, it
Still remains a job to sell it.

Though beekeeping be full of strife
We have, at least, OUR WAY OF LIFE.

Kerry Simpson

THEY'RE READING OUR NEWSLETTER THERE

It's nice to know you're appreciated! The January issue of *The Australasian Beekeeper* contained no less than five items from past issues of *Buzzwords*, including comments from your president on the overseas market and the fact that the Chinese honey marinade sold by NZ butchers contains Australian honey (sterilised, of course). And I guess we can't complain since quite a few of our articles are Australian sourced. Still, we try not to copy them straight off...

BUZZWORDS IS ...

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